WE CLAIM:

1. A system for milling at least one material, said system comprising a milling apparatus, said apparatus comprising:

(a) a milling chamber, said milling chamber comprising a hollow vessel for receipt of the at least one material; and

(b) a drive member, said drive member including at least one drive magnet, and said drive member being arranged to be rotated by an energy source,

(c) a milling head, said milling head being located within said milling chamber, being rotatably mounted with respect thereto, and including at least one driven magnet, said at least one drive magnet being magnetically coupled to said at least one driven magnet;

whereupon rotation of said drive member effects the concomitant rotation of said milling head with respect to said milling chamber, to effect the milling of the at least one material within said milling chamber.

2. The system of claim 1, wherein said drive member comprises a drive shaft having a first end portion and a longitudinal axis, wherein:

(a) the at least one drive magnet is coupled to said drive shaft at said first end portion,

(b) the milling head has a central bore in which a portion of said milling chamber is located but spaced slightly therefrom,

(c) the at least one driven magnet is located adjacent to said central bore, and

(d) the drive shaft is arranged to be rotated about said longitudinal axis by the energy source,

whereupon rotation of said drive shaft about said longitudinal axis effects the concomitant rotation of said milling head about said longitudinal axis.

3. The system of claim 2, wherein said portion of said milling chamber comprises a spindle having a central well therein.

4. The system of claim 3, wherein:

(a) said first end portion of said drive shaft is located within said central well; and

(b) said at least one drive magnet is magnetically coupled to said at least one driven magnet via said spindle.

5. The system of claim 1, further comprising at least one milling media for use therewith, wherein the milling media cooperates with said milling head to effect the milling of the at least one material within said milling chamber.

6. The system of claim 5, wherein said milling media comprise a plurality of small bodies.

7. The system of claim 6, wherein said small bodies have a particle size selected from the group consisting of less than about 500 microns, less than about 100 microns, less than about 75 microns, less than about 50 microns, less than about 25 microns, less than about 5 microns, less than about 3 mm, less than about 2 mm, less than about 1 mm, less than about 0.25 mm, and less than about 0.2 mm.

8. The system of any one of claim 5, wherein said at least one milling media comprise a polymeric material.

9. The system of claim 1, wherein said milling chamber is removably mounted with respect to said drive member, whereupon said milling chamber and said milling head can be removed as a unit from said drive member.

10. The system of claim 1, wherein said milling chamber includes a removable cover.

11. The system of claim 1, wherein said drive member is a shaft that is oriented vertically and is rotated by a motor.

12. The system of claim 1, wherein said milling head includes at least one member projecting outward therefrom to effect the milling of the at least one material within said milling chamber.

13. The system of claim 9, wherein said milling head comprises a plurality of pegs

projecting outward therefrom.

14. The system of claim 1 additionally comprising at least one bearing rotatably mounting said milling head within said milling chamber.

15. The system of claim 1, wherein said at least one drive magnet is a rare earth magnet.

16. The system of claim 1, wherein said at least one driven magnet is a rare earth magnet.

17. The system of claim 1, wherein the material exists as a crystalline phase, an amorphous phase, a semi-amorphous phase, a semi-crystalline phase, or a mixture thereof.

18. The system of claim 1, wherein the material is a drug.

19. The system of claim 18, wherein the drug is poorly soluble and is dispersible in at least one liquid medium.

20. The system of claim 19, wherein the liquid medium is selected from the group consisting of water, aqueous salt solutions, safflower oil, ethanol, t-butanol, hexane, and glycol.

21. The system of claim 18, wherein the drug is selected from the group consisting of peptides, proteins, peptide mimetics, antigens, vaccines, hormones, analgesics, anti-migraine agents, anti-coagulant agents, medications directed to the treatment of diseases and conditions of the central nervous system, narcotic antagonists, immunosuppressants, agents used in the treatment of AIDS, chelating agents, anti-anginal agents, chemotherapy agents, sedatives, anti-neoplastics, prostaglandins, antidiuretic agents, DNA molecules to support gene therapy, and DNNRNA molecules to support gene therapy.

22. The system of claim 18, wherein the drug is selected from the group consisting of insulin, calcitonin, calcitonin gene regulating protein, atrial natriuretic protein, betaserori, erythropoietin, alpha interferon, beta interferon, gamma interferon, somatropin, somatotropin, somastostatin, insulin-like growth factor, luteinizing hormone releasing hormone, factor VIII,

interleukins, interleukin analogues, hematological agents, anticoagulants, hematopoietic agents, hemostatics, thrombolytic agents, endocrine agents, antidiabetic agents, antithyroid agents, beta-adrenoceptor blocking agents, growth hormones, growth hormone releasing hormone, sex hormones, thyroid agents, parathyroid calcitonin, biphosphonates, uterine-active agents, cardiovascular agents, antiarrhythmic agents, anti-anginal agents, anti-hypertensive agents, vasodilators, agents used in treatment of heart disorders, cardiac inotropic agents, renal agents, genitounnary agents, antidiuretic agents, respiratory agents, antihistamines, cough suppressants, parasympathomimetics, sympathomimetics, xanthines, central nervous system agents, analgesics, anesthetics, anti-emetic agents, anorexiants, antidepressants, anti-migraine agents, antiepileptics, dopaminergics, anticholinergics, antiparkinsonian agents, muscle relaxants, narcotic antagonists, sedatives, stimulants, treatments for attention deficit disorder, methylphenidate, fluoxamine, bisolperol, tactolimuls, sacrolimus, cyclosporine, gastrointestinal agents, systemic anti-infectives, agents used in the treatment of AIDS, anthelmintics, antimycobacterial agents, immunologic agents, vaccines, hormones; dermatological agents including, anti-inflammatory agents, elastase inhibitors, antimuscarinic agents, lipid regulating agents, blood products, blood substitutes, antineoplastic agents including, leuprolide acetate, chemotherapy agents, oncology therapies, nutrients, nutritional agents, chelating agents.

23. The system of claim 22, wherein the drug is selected from the group consisting of interleukin-2, IL-1ra, heparin, hirudin, colony stimulating factors, tissue plasminogen activator, estradiol, oxytocin, nitroglycerine, diltiazem, clonidine, nifedipine, verapamil, isosorbide-5-mononitrate, organic nitrates, diuretics, desmopressin, vasopressin, expectorants, mucolytics, fentanyl, sufentanil, butorphanol, buprenorphine, levorphanol, morphine, hydromorphone, hydrocodone, oxymorphone, methadone, lidocaine, bupivacaine, diclofenac, naproxen, paverin, scopolamine, ondansetron, domperidone, metoclopramide, sumatriptan, ergot alkaloids, benzodiazepines, phenothiozines, prostaglandins antibiotics, antiviral agents, anti-fungals, immunosuppressants, anti-allergic agents, astringents, corticosteroids fluorouracil, bleomycin, vincristine, and deferoxamine.

24. The system of claim 1, wherein the material is a diagnostic aid.

25. The system of claim 24, wherein the diagnostic aid is selected from the group

consisting of diagnostic agents, diagnostic imaging agents, radio-pharmaceuticals, and contrast media.

26. The system of claim 1, wherein the material is milled in the presence of at least one surface stabilizer.

27. The system of claim 26, wherein the material is milled in the presence of at least two surface stabilizers.

28. The system of claim 26, wherein the surface stabilizer is selected from the group consisting of a nonionic surfactant, an anionic surfactant, a cationic surfactant, a zwitterionic surfactant, and an ionic surfactant.

29. The system of claim 26, wherein the surface stabilizer is selected from the group consisting of gelatin, casein, lecithin, dextran, gum acacia, cholesterol, tragacanth, stearic acid, benzalkonium chloride, calcium stearate, glycerol monostearate, cetostearyl alcohol, cetomacrogol emulsifying wax, sorbitan esters, polyoxyethylene alkyl ethers, polyoxyethylene castor oil derivatives, polyoxyethylene sorbitan fatty acid esters, polyethylene glycols, polyoxyethylene stearates, colloidal silicon dioxide, phosphates, sodium dodecylsulfate, carboxymethylcellulose calcium, carboxymethylcellulose sodium, methylcellulose, hydroxyethylcellulose, hydroxypropyl celluloses, hydroxypropyl methylcellulose, hydroxypropylmethyl-cellulose phthalate, noncrystalline cellulose, magnesium aluminum silicate, triethanolamine, polyvinyl alcohol, polyvinylpyrrolidone, tyloxapol, poloxamers, poloxamines, Tetronic 1508®, dialkylesters of sodium sulfosuccinic acid, sodium lauryl sulfate, alkyl aryl polyether sulfonate, a mixture of sucrose stearate and sucrose distearate, p-isononylphenoxypoly-(glycidol), Crodestas SL-40®, $C_{18}H_{37}CH_2C(O)N(CH_3)\text{-}CH_2(CHOH)_4(CH_2OH)_2$, decanoyl-N-methylglucamide, n-decyl β-D-glucopyranoside, n-decyl β-D-maltopyranoside, n-dodecyl β-D-glucopyranoside, n-dodecyl β-D-maltoside, heptanoyl-N-methylglucamide, n-heptyl-β-D-glucopyranoside, n-heptyl β-D-thioglucoside, n-hexyl β-D-glucopyranoside, nonanoyl-N-methylglucamide, n-noyl β-D-glucopyranoside, octanoyl-N-methylglucamide, n-octyl-β-D-glucopyranoside, octyl β-D-thioglucopyranoside, lysozyme, PEG-derivatized phospholipid, PEG-derivatized

cholesterol, PEG-derivatized cholesterol derivative, PEG-derivatized vitamin A, PEG-derivatized vitamin E, and random copolymers of vinyl pyrrolidone and vinyl acetate.

30. The system of claim 26, wherein the surface stabilizer is selected from the group consisting of cationic polymers, cationic biopolymers, cationic polysaccharides, cationic cellulosics, cationic alginates, cationic phospholipids, cationic lipids, and nonpolymeric cationic compounds.

31. The system of claim 26, wherein the surface stabilizer is selected from the group consisting of poly-n-methylpyridinium, anthryul pyridinium chloride, dimyristoyl phophatidyl glycerol, chitosan, polylysine, polyvinylimidazole, polybrene, polymethylmethacrylate trimethylammoniumbromide bromide, hexyldesyltrimethylammonium bromide, and polyvinylpyrrolidone-2-dimethylaminoethyl methacrylate dimethyl sulfate. sulfonium, phosphonium, quarternary ammonium compounds, benzyl-di(2-chloroethyl)ethylammonium bromide, coconut trimethyl ammonium chloride, coconut trimethyl ammonium bromide, coconut methyl dihydroxyethyl ammonium chloride, coconut methyl dihydroxyethyl ammonium bromide, dodecyl trimethyl ammonium bromide, decyl triethyl ammonium chloride, decyl dimethyl hydroxyethyl ammonium chloride, decyl dimethyl hydroxyethyl ammonium bromide, C_{12-15}dimethyl hydroxyethyl ammonium chloride, C_{12-15}dimethyl hydroxyethyl ammonium bromide, coconut dimethyl hydroxyethyl ammonium chloride, coconut dimethyl hydroxyethyl ammonium bromide, myristyl trimethyl ammonium methyl sulphate, lauryl dimethyl benzyl ammonium chloride, lauryl dimethyl benzyl ammonium bromide, lauryl dimethyl $(ethenoxy)_4$ ammonium chloride, lauryl dimethyl $(ethenoxy)_4$ ammonium bromide, N-alkyl (C_{12-18})dimethylbenzyl ammonium chloride, N-alkyl (C_{14-18})dimethyl-benzyl ammonium chloride, N-tetradecylidmethylbenzyl ammonium chloride monohydrate, dimethyl didecyl ammonium chloride, N-alkyl 1-napthylmethyl ammonium chloride, (C_{12-14}) dimethyl 1-napthylmethyl ammonium chloride, trimethylammonium halide, alkyl-trimethylammonium salts, dialkyl-dimethylammonium salts, lauryl trimethyl ammonium chloride, ethoxylated alkyamidoalkyldialkylammonium salt, an ethoxylated trialkyl ammonium salt, dialkylbenzene dialkylammonium chloride, N-didecyldimethyl ammonium chloride, N-tetradecyldimethylbenzyl ammonium, chloride monohydrate, N-alkyl(C_{12-14}) dimethyl 1-naphthylmethyl ammonium chloride, dodecyldimethylbenzyl ammonium chloride, dialkyl benzenealkyl ammonium chloride,

lauryl trimethyl ammonium chloride, alkylbenzyl methyl ammonium chloride, alkyl benzyl dimethyl ammonium bromide, C_{12} trimethyl ammonium bromides, C_{15} trimethyl ammonium bromides, C_{17} trimethyl ammonium bromides, dodecylbenzyl triethyl ammonium chloride, poly-diallyldimethylammonium chloride, dimethyl ammonium chlorides, alkyldimethylammonium halogenides, tricetyl methyl ammonium chloride, decyltrimethylammonium bromide, dodecyltriethylammonium bromide, tetradecyltrimethylammonium bromide, methyl trioctylammonium chloride, POLYQUAT 10™, tetrabutylammonium bromide, benzyl trimethylammonium bromide, choline esters, benzalkonium chloride, stearalkonium chloride compounds, cetyl pyridinium bromide, cetyl pyridinium bromide chloride, halide salts of quaternized polyoxyethylalkylamines, MIRAPOL™, ALKAQUAT™, alkyl pyridinium salts, amines, amine salts, amine oxides, imide azolinium salts, protonated quaternary acrylamides, methylated quaternary polymers, and cationic guar.

32. The system of claim 26, wherein the surface stabilizer is selected from the group consisting of benzalkonium chloride, a carbonium compound, a phosphonium compound, an oxonium compound, a halonium compound, a cationic organometallic compound, a quarternary phosphorous compound, a pyridinium compound, an anilinium compound, an immonium compound, a hydroxylammonium compound, a primary ammonium compound, a secondary ammonium compound, a tertiary ammonium compound, behenalkonium chloride, benzethonium chloride, cetylpyridinium chloride, behentrimonium chloride, lauralkonium chloride, cetalkonium chloride, cetrimonium bromide, cetrimonium chloride, cethylamine hydrofluoride, chlorallylmethenamine chloride (Quaternium-15), distearyldimonium chloride (Quaternium-5), dodecyl dimethyl ethylbenzyl ammonium chloride (Quaternium-14), Quaternium-22, Quaternium-26, Quaternium-18 hectorite, dimethylaminoethylchloride hydrochloride, cysteine hydrochloride, diethanolammonium POE (10) oletyl ether phosphate, diethanolammonium POE (3)oleyl ether phosphate, tallow alkonium chloride, dimethyl dioctadecylammoniumbentonite, stearalkonium chloride, domiphen bromide, denatonium benzoate, myristalkonium chloride, laurtrimonium chloride, ethylenediamine dihydrochloride, guanidine hydrochloride, pyridoxine HCl, iofetamine hydrochloride, meglumine hydrochloride, methylbenzethonium chloride, myrtrimonium bromide, oleyltrimonium chloride, polyquaternium-1, procainehydrochloride, cocobetaine, stearalkonium bentonite, stearalkoniumhectonite, stearyl trihydroxyethyl propylenediamine

dihydrofluoride, tallowtrimonium chloride, and hexadecyltrimethyl ammonium bromide.

33. The system of claim 1, wherein the milled material has an effective average particle size of less than about 2 microns.

34. The system of claim 33, wherein the milled material has an effective average particle size selected from the group consisting of less than about 1900 nm, less than about 1800 nm, less than about 1700 nm, less than about 1600 nm, less than about 1500 nm, less than about 1400 nm, less than about 1300 nm, less than about 1200 nm, less than about 1100 nm, less than about 1000 nm, less than about 900 nm, less than about 800 nm, less than about 700 nm, less than about 600 nm, less than about 500 nm, less than about 400 nm, less than about 300 nm, less than about 250 nm, less than about 200 nm, less than about 150 nm, less than about 100 nm, less than about 75 nm, and less than about 50 nm.

35. A method for milling at least one material comprising:

(a) providing a milling chamber having a milling head located therein;

(b) providing the at least one material in said milling chamber;

(c) providing at least one milling media in said milling chamber;

(d) providing a shaft arranged to be rotated about a longitudinal axis by a source of energy; and

(e) magnetically coupling said shaft to said milling head to rotate said milling head about said axis in said milling chamber, whereupon rotation of said shaft about said axis effects the concomitant rotation of said milling head to effect the milling of the at least one material within said milling chamber.

36. The method of claim 35, wherein said milling chamber is releasably mounted on said shaft, and wherein said method comprises removing said milling chamber and said milling head as a unit from said shaft.

37. The method of claim 35, wherein said milling media comprise a plurality of small bodies.

38. The method of claim 37, wherein said small bodies have a particle size selected from the group consisting of less than about 500 microns, less than about 100 microns, less than about 75 microns, less than about 50 microns, less than about 25 microns, less than about 5 microns, less than about 3 mm, less than about 2 mm, less than about 1 mm, less than about 0.25 mm, and less than about 0.2 mm.

39. The method of claim 35, wherein said at least one milling media comprise a polymeric material.

40. The method of claim 35, wherein the material is a drug.

41. The method of claim 40, wherein the drug is poorly soluble and is dispersible in at least one liquid medium.

42. The method of claim 41, wherein the liquid medium is selected from the group consisting of water, aqueous salt solutions, safflower oil, ethanol, t-butanol, hexane, and glycol.

43. The method of claim 40, wherein the drug is selected from the group consisting of peptides, proteins, peptide mimetics, antigens, vaccines, hormones, analgesics, anti-migraine agents, anti-coagulant agents, medications directed to the treatment of diseases and conditions of the central nervous system, narcotic antagonists, immunosuppressants, agents used in the treatment of AIDS, chelating agents, anti-anginal agents, chemotherapy agents, sedatives, anti-neoplastics, prostaglandins, antidiuretic agents, DNA molecules to support gene therapy, and DNNRNA molecules to support gene therapy.

44. The method of claim 40, wherein the drug is selected from the group consisting of insulin, calcitonin, calcitonin gene regulating protein, atrial natriuretic protein, betaserori, erythropoietin, alpha interferon, beta interferon, gamma interferon, somatropin, somatotropin, somastostatin, insulin-like growth factor, luteinizing hormone releasing hormone, factor VIII, interleukins, interleukin analogues, hematological agents, anticoagulants, hematopoietic agents, hemostatics, thrombolytic agents, endocrine agents, antidiabetic agents, antithyroid agents, beta-adrenoceptor blocking agents, growth hormones, growth hormone releasing

hormone, sex hormones, thyroid agents, parathyroid calcitonin, biphosphonates, uterine-active agents, cardiovascular agents, antiarrhythmic agents, anti-anginal agents, anti-hypertensive agents, vasodilators, agents used in treatment of heart disorders, cardiac inotropic agents, renal agents, genitounnary agents, antidiuretic agents, respiratory agents, antihistamines, cough suppressants, parasympathomimetics, sympathomimetics, xanthines, central nervous system agents, analgesics, anesthetics, anti-emetic agents, anorexiants, antidepressants, anti-migraine agents, antiepileptics, dopaminergics, anticholinergics, antiparkinsonian agents, muscle relaxants, narcotic antagonists, sedatives, stimulants, treatments for attention deficit disorder, methylphenidate, fluoxamine, bisolperol, tactolimuls, sacrolimus, cyclosporine, gastrointestinal agents, systemic anti-infectives, agents used in the treatment of AIDS, anthelmintics, antimycobacterial agents, immunologic agents, vaccines, hormones; dermatological agents including, anti-inflammatory agents, elastase inhibitors, antimuscarinic agents, lipid regulating agents, blood products, blood substitutes, antineoplastic agents including, leuprolide acetate, chemotherapy agents, oncology therapies, nutrients, nutritional agents, chelating agents.

45. The method of claim 44, wherein the drug is selected from the group consisting of interleukin-2, IL-1ra, heparin, hirudin, colony stimulating factors, tissue plasminogen activator, estradiol, oxytocin, nitroglycerine, diltiazem, clonidine, nifedipine, verapamil, isosorbide-5-mononitrate, organic nitrates, diuretics, desmopressin, vasopressin, expectorants, mucolytics, fentanyl, sufentanil, butorphanol, buprenorphine, levorphanol, morphine, hydromorphone, hydrocodone, oxymorphone, methadone, lidocaine, bupivacaine, diclofenac, naproxen, paverin, scopolamine, ondansetron, domperidone, metoclopramide, sumatriptan, ergot alkaloids, benzodiazepines, phenothiozines, prostaglandins antibiotics, antiviral agents, anti-fungals, immunosuppressants, anti-allergic agents, astringents, corticosteroids fluorouracil, bleomycin, vincristine, and deferoxamine.

46. The method of claim 35, wherein the material is a diagnostic aid.

47. The method of claim 46, wherein the diagnostic aid is selected from the group consisting of diagnostic agents, diagnostic imaging agents, radio-pharmaceuticals, and contrast media.

48. The method of claim 35, wherein the milled material has an effective average particle size of less than about 2 microns.

49. The method of claim 48, wherein the milled material has an effective average particle size selected from the group consisting of less than about 1900 nm, less than about 1800 nm, less than about 1700 nm, less than about 1600 nm, less than about 1500 nm, less than about 1400 nm, less than about 1300 nm, less than about 1200 nm, less than about 1100 nm, less than about 1000 nm, less than about 900 nm, less than about 800 nm, less than about 700 nm, less than about 600 nm, less than about 500 nm, less than about 400 nm, less than about 300 nm, less than about 250 nm, less than about 200 nm, less than about 150 nm, less than about 100 nm, less than about 75 nm, and less than about 50 nm.

50. The method of claim 35, wherein the material is milled in the presence of at least one surface stabilizer.

51. The method of claim 35, wherein the material is milled in the presence of at least two surface stabilizers.

52. The method of claim 50, wherein the surface stabilizer is selected from the group consisting of a nonionic surfactant, an anionic surfactant, a cationic surfactant, a zwitterionic surfactant, and an ionic surfactant.

53. The method of claim 50, wherein the surface stabilizer is selected from the group consisting of gelatin, casein, lecithin, dextran, gum acacia, cholesterol, tragacanth, stearic acid, benzalkonium chloride, calcium stearate, glycerol monostearate, cetostearyl alcohol, cetomacrogol emulsifying wax, sorbitan esters, polyoxyethylene alkyl ethers, polyoxyethylene castor oil derivatives, polyoxyethylene sorbitan fatty acid esters, polyethylene glycols, polyoxyethylene stearates, colloidal silicon dioxide, phosphates, sodium dodecylsulfate, carboxymethylcellulose calcium, carboxymethylcellulose sodium, methylcellulose, hydroxyethylcellulose, hydroxypropyl celluloses, hydroxypropyl methylcellulose, hydroxypropylmethyl-cellulose phthalate, noncrystalline cellulose, magnesium aluminum silicate, triethanolamine, polyvinyl alcohol, polyvinylpyrrolidone, tyloxapol, poloxamers, poloxamines, Tetronic 1508®, dialkylesters of sodium sulfosuccinic

acid, sodium lauryl sulfate, alkyl aryl polyether sulfonate, a mixture of sucrose stearate and sucrose distearate, p-isononylphenoxypoly-(glycidol), Crodestas SL-40®, $C_{18}H_{37}CH_2C(O)N(CH_3)$-$CH_2(CHOH)_4(CH_2OH)_2$, decanoyl-N-methylglucamide, n-decyl β-D-glucopyranoside, n-decyl β-D-maltopyranoside, n-dodecyl β-D-glucopyranoside, n-dodecyl β-D-maltoside, heptanoyl-N-methylglucamide, n-heptyl-β-D-glucopyranoside, n-heptyl β-D-thioglucoside, n-hexyl β-D-glucopyranoside, nonanoyl-N-methylglucamide, n-noyl β-D-glucopyranoside, octanoyl-N-methylglucamide, n-octyl-β-D-glucopyranoside, octyl β-D-thioglucopyranoside, lysozyme, PEG-derivatized phospholipid, PEG-derivatized cholesterol, PEG-derivatized cholesterol derivative, PEG-derivatized vitamin A, PEG-derivatized vitamin E, and random copolymers of vinyl pyrrolidone and vinyl acetate.

54. The method of claim 50, wherein the surface stabilizer is selected from the group consisting of cationic polymers, cationic biopolymers, cationic polysaccharides, cationic cellulosics, cationic alginates, cationic phospholipids, cationic lipids, and nonpolymeric cationic compounds.

55. The method of claim 50, wherein the surface stabilizer is selected from the group consisting of poly-n-methylpyridinium, anthryul pyridinium chloride, dimyristoyl phophatidyl glycerol, chitosan, polylysine, polyvinylimidazole, polybrene, polymethylmethacrylate trimethylammoniumbromide bromide, hexyldesyltrimethylammonium bromide, and polyvinylpyrrolidone-2-dimethylaminoethyl methacrylate dimethyl sulfate. sulfonium, phosphonium, quarternary ammonium compounds, benzyl-di(2-chloroethyl)ethylammonium bromide, coconut trimethyl ammonium chloride, coconut trimethyl ammonium bromide, coconut methyl dihydroxyethyl ammonium chloride, coconut methyl dihydroxyethyl ammonium bromide, dodecyl trimethyl ammonium bromide, decyl triethyl ammonium chloride, decyl dimethyl hydroxyethyl ammonium chloride, decyl dimethyl hydroxyethyl ammonium bromide, C_{12-15}dimethyl hydroxyethyl ammonium chloride, C_{12-15}dimethyl hydroxyethyl ammonium bromide, coconut dimethyl hydroxyethyl ammonium chloride, coconut dimethyl hydroxyethyl ammonium bromide, myristyl trimethyl ammonium methyl sulphate, lauryl dimethyl benzyl ammonium chloride, lauryl dimethyl benzyl ammonium bromide, lauryl dimethyl (ethenoxy)$_4$ ammonium chloride, lauryl dimethyl (ethenoxy)$_4$ ammonium bromide, N-alkyl (C_{12-18})dimethylbenzyl ammonium chloride, N-

alkyl (C_{14-18})dimethyl-benzyl ammonium chloride, N-tetradecylidmethylbenzyl ammonium chloride monohydrate, dimethyl didecyl ammonium chloride, N-alkyl 1-napthylmethyl ammonium chloride, (C_{12-14}) dimethyl 1-napthylmethyl ammonium chloride, trimethylammonium halide, alkyl-trimethylammonium salts, dialkyl-dimethylammonium salts, lauryl trimethyl ammonium chloride, ethoxylated alkyamidoalkyldialkylammonium salt, an ethoxylated trialkyl ammonium salt, dialkylbenzene dialkylammonium chloride, N-didecyldimethyl ammonium chloride, N-tetradecyldimethylbenzyl ammonium, chloride monohydrate, N-alkyl(C_{12-14}) dimethyl 1-naphthylmethyl ammonium chloride, dodecyldimethylbenzyl ammonium chloride, dialkyl benzenealkyl ammonium chloride, lauryl trimethyl ammonium chloride, alkylbenzyl methyl ammonium chloride, alkyl benzyl dimethyl ammonium bromide, C_{12} trimethyl ammonium bromides, C_{15} trimethyl ammonium bromides, C_{17} trimethyl ammonium bromides, dodecylbenzyl triethyl ammonium chloride, poly-diallyldimethylammonium chloride, dimethyl ammonium chlorides, alkyldimethylammonium halogenides, tricetyl methyl ammonium chloride, decyltrimethylammonium bromide, dodecyltriethylammonium bromide, tetradecyltrimethylammonium bromide, methyl trioctylammonium chloride, POLYQUAT 10™, tetrabutylammonium bromide, benzyl trimethylammonium bromide, choline esters, benzalkonium chloride, stearalkonium chloride compounds, cetyl pyridinium bromide, cetyl pyridinium bromide chloride, halide salts of quaternized polyoxyethylalkylamines, MIRAPOL™, ALKAQUAT™, alkyl pyridinium salts, amines, amine salts, amine oxides, imide azolinium salts, protonated quaternary acrylamides, methylated quaternary polymers, and cationic guar.

56. The method of claim 50, wherein the surface stabilizer is selected from the group consisting of benzalkonium chloride, a carbonium compound, a phosphonium compound, an oxonium compound, a halonium compound, a cationic organometallic compound, a quarternary phosphorous compound, a pyridinium compound, an anilinium compound, an immonium compound, a hydroxylammonium compound, a primary ammonium compound, a secondary ammonium compound, a tertiary ammonium compound, behenalkonium chloride, benzethonium chloride, cetylpyridinium chloride, behentrimonium chloride, lauralkonium chloride, cetalkonium chloride, cetrimonium bromide, cetrimonium chloride, cethylamine hydrofluoride, chlorallylmethenamine chloride (Quaternium-15), distearyldimonium chloride (Quaternium-5), dodecyl dimethyl ethylbenzyl ammonium chloride (Quaternium-14),

Quaternium-22, Quaternium-26, Quaternium-18 hectorite, dimethylaminoethylchloride hydrochloride, cysteine hydrochloride, diethanolammonium POE (10) oletyl ether phosphate, diethanolammonium POE (3)oleyl ether phosphate, tallow alkonium chloride, dimethyl dioctadecylammoniumbentonite, stearalkonium chloride, domiphen bromide, denatonium benzoate, myristalkonium chloride, laurtrimonium chloride, ethylenediamine dihydrochloride, guanidine hydrochloride, pyridoxine HCl, iofetamine hydrochloride, meglumine hydrochloride, methylbenzethonium chloride, myrtrimonium bromide, oleyltrimonium chloride, polyquaternium-1, procainehydrochloride, cocobetaine, stearalkonium bentonite, stearalkoniumhectonite, stearyl trihydroxyethyl propylenediamine dihydrofluoride, tallowtrimonium chloride, and hexadecyltrimethyl ammonium bromide.